Day Care Personnel Working in Alberta 1989 to 1991

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June, 1992

92-07398/

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1.0 Introduction

The Alberta Health and Social Services Disciplines Committee has conducted an annual survey of health and social service employers since 1979. The survey collected information from employers on full-time and part-time permanent personnel, vacant positions, resignations, casual/contract personnel and recruitment difficulties. A general overview of the results of the 1991 survey is given in the annual publication "Health and Social Service Workforce in Alberta, 1991".

Day care operators were included in the survey for the first time in 1988. The survey measured two categories of personnel employed in day care centres, day care directors and day care workers, by educational level. The occupational category of day care director included personnel responsible for planning and implementing the program of a day care centre, managing day-to-day operations and supervising staff. Day care workers included those individuals responsible for the supervision and care of children in a day care centre under the direction of the centre's director. Assistant directors, program supervisors and senior workers were included in the category of day care worker.

Separate information on permanent personnel, vacancy rates, and turnover rates was requested for day care directors and day care workers who held either a Degree in Early Childhood Education, a Diploma in Early Childhood Education, a one year Certificate in Early Childhood Education, some other day care certificate, a related degree or diploma, or an unrelated degree or diploma. An 'other' category was given for day care personnel who had none of these qualifications. Information on casual personnel, three month vacancies and recruitment difficulties was requested for the first time in 1991. A more detailed description of survey methodology is given in Appendix 1.

Response rates to the survey by day care operators have been very good. In 1991, 638 day care centres out of the total 661 surveyed responded, resulting in a 96.5 percent response rate. A summary of the data from 1989 to 1991 for day care directors is found in Appendix 3 and in Appendix 4 for day care workers. The tables in both of these appendices provide an analysis of day care personnel from 1989 to 1991 by educational level and by social service region.[1]

It should be recognized that the figures presented throughout the report provide an aggregate profile of day care personnel employed in the province, and as such, should not be taken to represent the workforce profile of an individual day care centre (e.g., the proportion of day care personnel with a degree in child education in the province does not indicate the proportion of day care personnel with a degree within a given day care centre).

Day care personnel represented 7.2 percent of the health and social service personnel employed in the province in 1991. Of these day care personnel, 86.8 percent (5,435) were day care workers and 13.2 percent (827) were day care directors. From 1990 to 1991, there was a notable decrease in the number of day care workers (5.4%) while the number of day care directors showed little change. Some highlights from the data on day care personnel collected in the annual employer surveys from 1989 to 1991 are provided below.

- There was very little change in the educational qualifications of day care workers from 1989 to 1991. Similar to 1989, almost one in four (23.1%) day care workers

[1] Social Service Regions divide the province into six areas and are utilized primarily by Alberta Family and Social Services for planning and program delivery. See Appendix 2 for a definition of these regions.

in 1991 had either a degree, diploma or certificate in early childhood education, while the majority of workers (68.5%) had no related post-secondary credentials.

- Approximately one in two (48.5%) day care directors had either a degree, diploma, or certificate in early childhood education in 1991. As well, the proportion of day care directors with a degree or diploma in early childhood education in 1991 (32.6%) showed a notable increase from 1989 (25.3%).

- The occupations of day care worker and day care director had low percentages of part-time personnel in 1991 (21.0% and 5.2%, respectively) compared to all health and social service occupations combined (35.7%).

- A total of 5.3 percent of the full-time equivalent positions (permanent and casual/contract) for day care workers during March, 1991 were casual/contract positions. Day care directors had a slightly lower proportion (4.0%) of casual/contract positions during March, 1991.

- From 1989 to 1991, there were increases in the number of full-time equivalent resignations among day care directors (79 to 205) and among day care workers (1,610 to 1,894). The corresponding turnover rate rose from 10.8 percent to 24.7 percent for day care directors and from 31.0 percent to 37.9 percent for day care workers.

2.0 Alberta in Review and Future Trends

To place the day care sector in context, a brief review of some of the demographic, social and economic changes in Alberta is provided below.

Demographic and Economic Changes

- Alberta's population grew by 52,000 (2.1%) during the year prior to March 31, 1991, the highest 12 month growth since 1982. Increases during 1990 in both interprovincial migration (9,000), primarily from Ontario, and international migration (13,000) resulted from the more promising economic and employment prospects in Alberta compared to other provinces. With respect to day care aged children, the population of children age nine or less increased by 1.8 percent from January 1, 1990 to January 1, 1991.

- The annual increase in the size of the labour force (2.7%), due mainly to increased migration to the province, exceeded the growth in employment (1.1%) from March, 1990 to March, 1991. As a result, the seasonally adjusted provincial unemployment rate in March increased from 6.4 percent (1990) to 7.7 percent (1991).

- There was an increase in the number of unemployment insurance claims filed during March by personnel in health and social service occupations from 1990 to 1991. Some of the largest increases in the number of claims occurred for registered nurses/graduate nurses/nurses in training (208 to 485), nursing attendants (295 to 396), social workers (219 to 249), licensed practical nurses (154 to 167), pharmacists

(16 to 31) and dietitians/nutritionists (15 to 26).[2]

- The Canadian economy entered a recession in 1990. Cost containment and improved economic efficiency were some of the general themes throughout most sectors of the province. The provincial government's efforts at budget control continued to limit the growth of public expenditures.

- Major changes were introduced to the government funding of Alberta's Day Care Program. The operating allowance funds currently paid to day care centres will be phased down by 1994 and reallocated to an expanded Child Care Subsidy Program which will provide day care support to eligible lower income parents. The first step in implementing this new funding arrangement occurred in July 1991, with the reduction of the operating allowance from $257 per month for infants (age birth to 12 months) to $200.

Educational Initiatives

- As part of the reforms to Alberta's Day Care Program, the provincial government defined new staff training requirements in legislated regulations that will be phased in over the next five years. By September 1, 1993, all program directors must have a one year certificate in early childhood education (or its equivalent) and by 1995, all program directors will be required to have a degree or diploma in early childhood education (or its equivalent). Directors who have five years experience in a position as director or its equivalent by December 1, 1990 and who obtain a one year early childhood education certificate by September 1, 1993 will also meet the certification requirements for director. With respect to child care workers, one in six primary staff (child care workers) will need a minimum of a one year certificate in early childhood education by September 1, 1992. The ratio of child care workers with a minimum of a one year certificate to other child care workers will increase to one out of four by September 1, 1995.

3.0 Permanent Personnel

3.1 Day Care Directors

• Approximately one in three day care directors (32.6%) employed on March 31, 1991 had either a diploma or degree in early childhood education. Another 15.8 percent of directors had a one year certificate in early childhood education. All combined, directors with a related degree, diploma or certificate in early childhood education accounted for almost one-half (48.5%) of day care directors in the province. A notable proportion of the remaining day care directors (33.0%) had no related post-secondary credentials in early childhood education.

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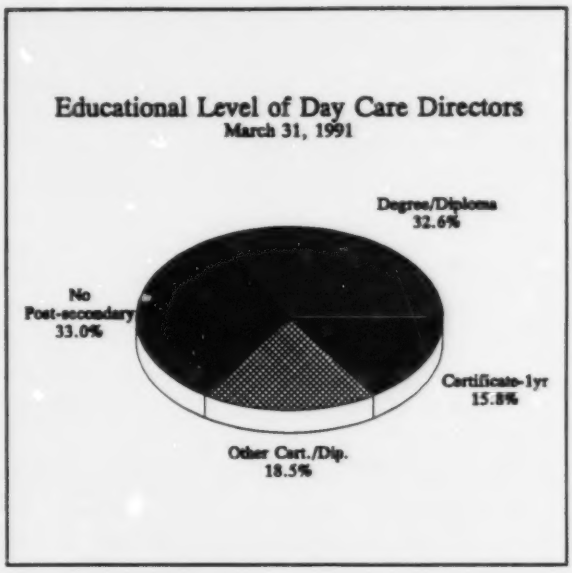
[1] The data on unemployment insurance claimants was supplied by the Alberta Bureau of Statistics and refers to regular active claimants during March, 1990 and March, 1991 only. Regular active claimants include those claimants on lay-off; those who have voluntarily left their jobs and are looking for work; those who are part-time workers; those who are trainees covered by job-sharing or job creation agreements. It is important to note that the characteristics of the unemployment insurance claimant population cannot be interpreted as the characteristics of all unemployed persons as described by Statistics Canada's Labour Force Survey.

• The proportion of directors who had a degree or diploma in early childhood education increased from 1989 (25.3%) to 1991 (32.6%). This increase in the percentage of directors with a degree or diploma occurred across almost all social service regions.

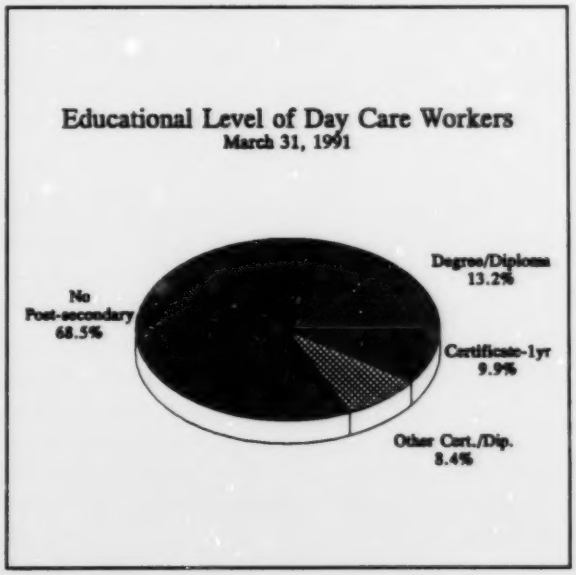


• There was almost no change from 1989 to 1991 in the proportion of directors who had a certificate in early childhood education (16.7% to 15.8%) or those directors who had no related post-secondary credentials (34.9% to 33.0%).

• The educational qualifications of directors varied considerably across social service regions. The social service regions which had the highest proportions of directors with a degree, diploma or one year certificate in early childhood education included the Calgary (excluding the City of Calgary) region (75.9%), the northwest region (64.3%), the northeast region (57.7%), and the central region (53.7%). Substantially lower percentages of directors with post-secondary qualifications related to early childhood education were seen in the Edmonton (excluding the City of Edmonton) region (39.4%) and the south region (30.6%).

3.2 Day Care Workers

• In 1991, almost one in four day care workers (23.1%) had either a degree, diploma, or one year certificate in early childhood education. The large majority of day care workers, close to seven out of ten (68.5%), had no related post-secondary credentials.

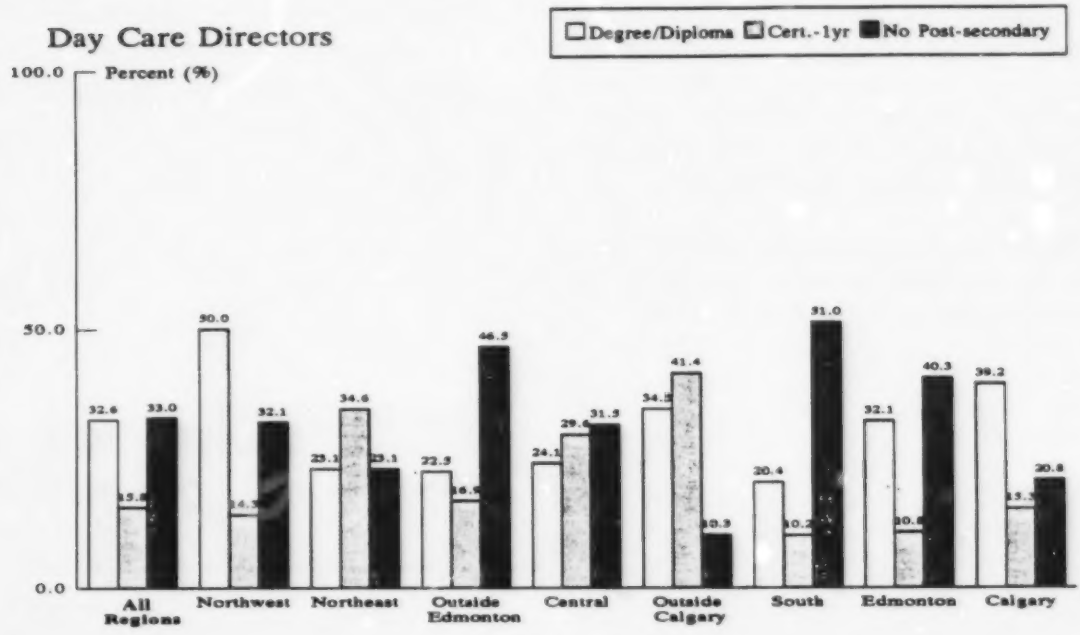


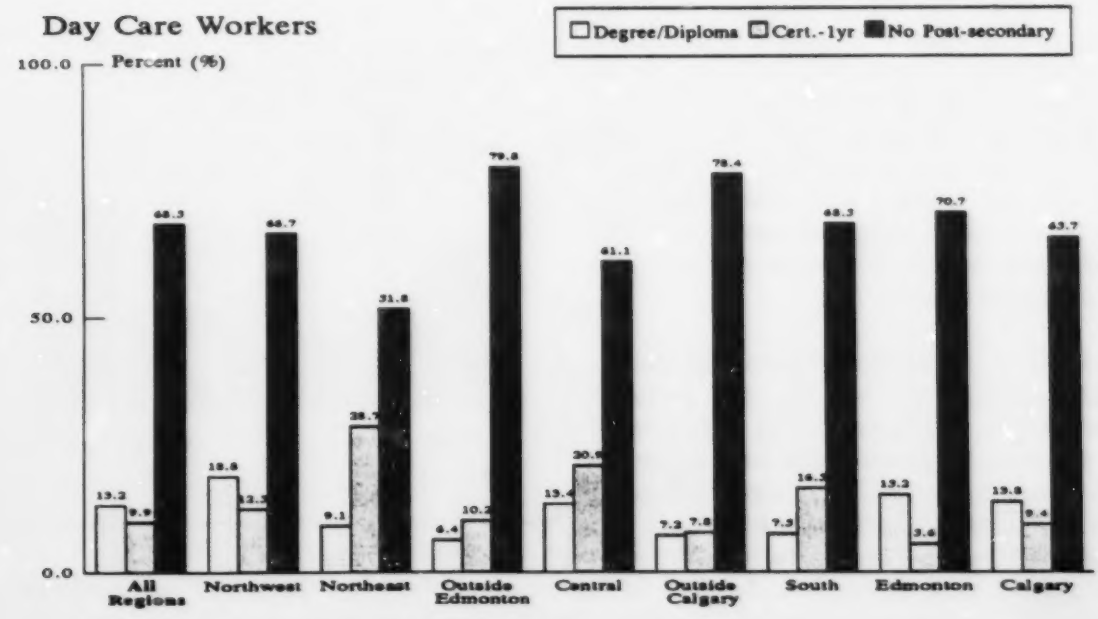
• There was very little change from 1989 to 1991 in the educational qualifications of day care workers. From 1989 to 1991, there was a small increase in the proportion of day care workers with a degree or diploma (12.8% to 13.2%). The proportion with a one year certificate (9.9%) remained the same from 1989 to 1991. There was a slight decrease in the percentage of day care workers with no related post-secondary qualifications (69.3% to 68.5%).

• There was considerable variation in the training credentials of day care workers across social service regions in 1991. Notably higher proportions of day care workers had either a degree, diploma, or one year certificate in the northeast region (37.8%), the central region (34.3%), the northwest region (31.3%) while significantly lower proportions of post-secondary graduates in fields

Percentage of Day Care Personnel with Credentials in Early Childhood Education by Social Service Region*

March 31, 1991





* Day care personnel with a diploma or certificate in fields related to child education are included in the percentage calculations but are not displayed in the graphs.

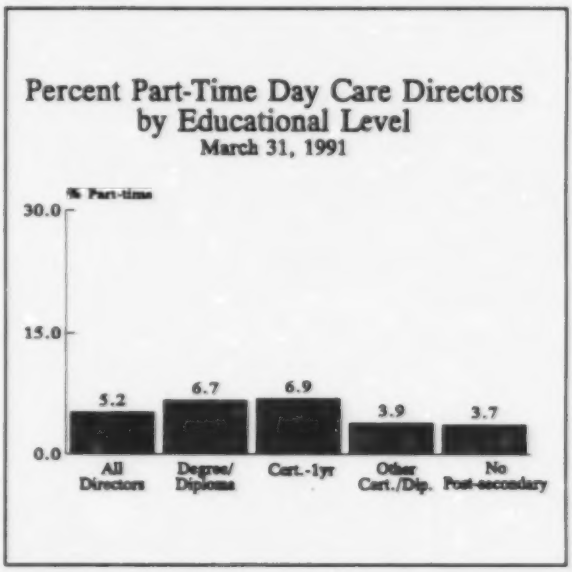
related to early childhood education were reported in the social service regions in Calgary (excluding the City of Calgary) (15.0%), Edmonton (excluding the City of Edmonton) (16.6%), the City of Edmonton (20.8%), the City of Calgary (23.2%) and the south region (24.0%).

4.0 Part-time Permanent Personnel

4.1 Day Care Directors

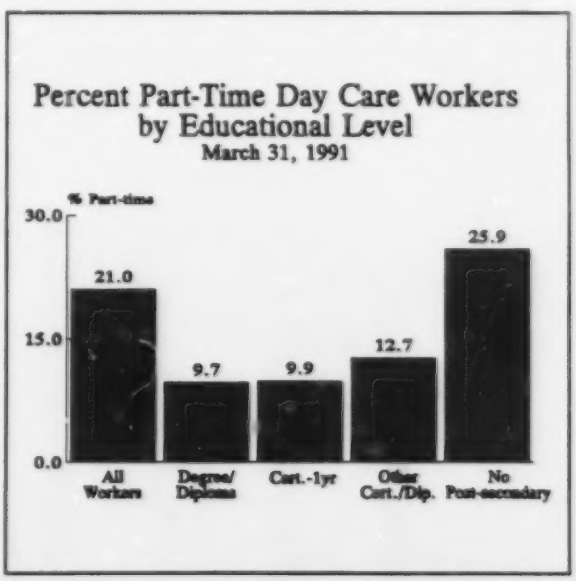
• The percentage of day care directors employed on a part-time basis (5.2%) in 1991 was low compared to day care workers (21.0%), as well as compared to all health and social service occupations (35.7%).

• There were consistently low levels of part-time day care directors across all educational levels and across all social service regions.



4.2 Day Care Workers

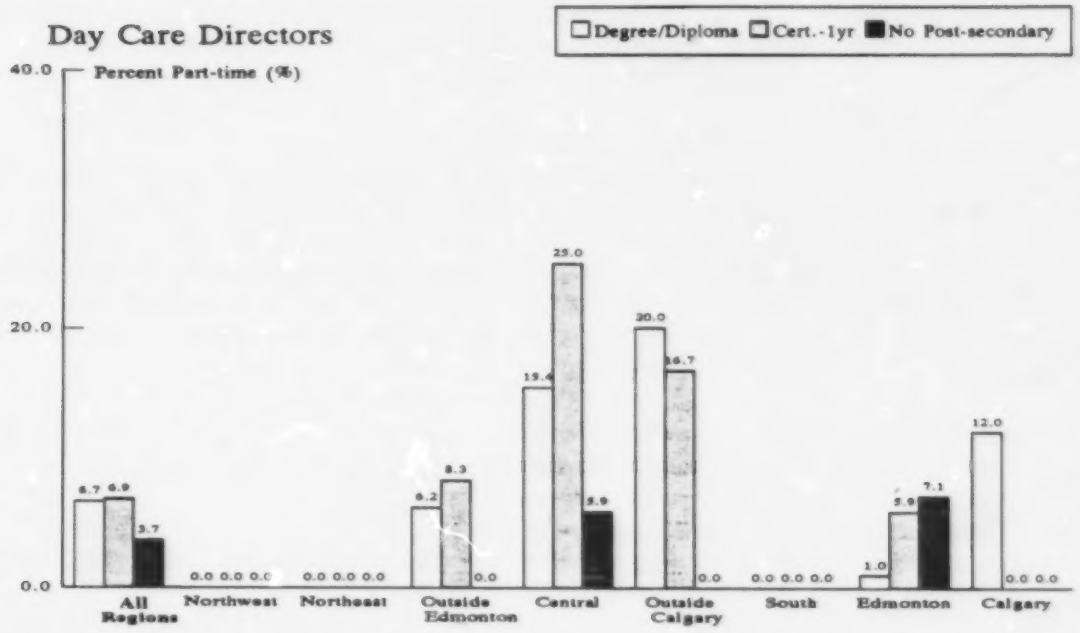
• One in five day care workers (21.0%) were employed on a part-time basis in March, 1991. The highest proportion of part-time staff was reported for day care workers having no related post-secondary credentials (25.9%), while the lowest proportions of part-time were reported for day care workers with either a degree or diploma in early childhood education (9.7%) and among workers with a one year certificate in child care (9.9%).

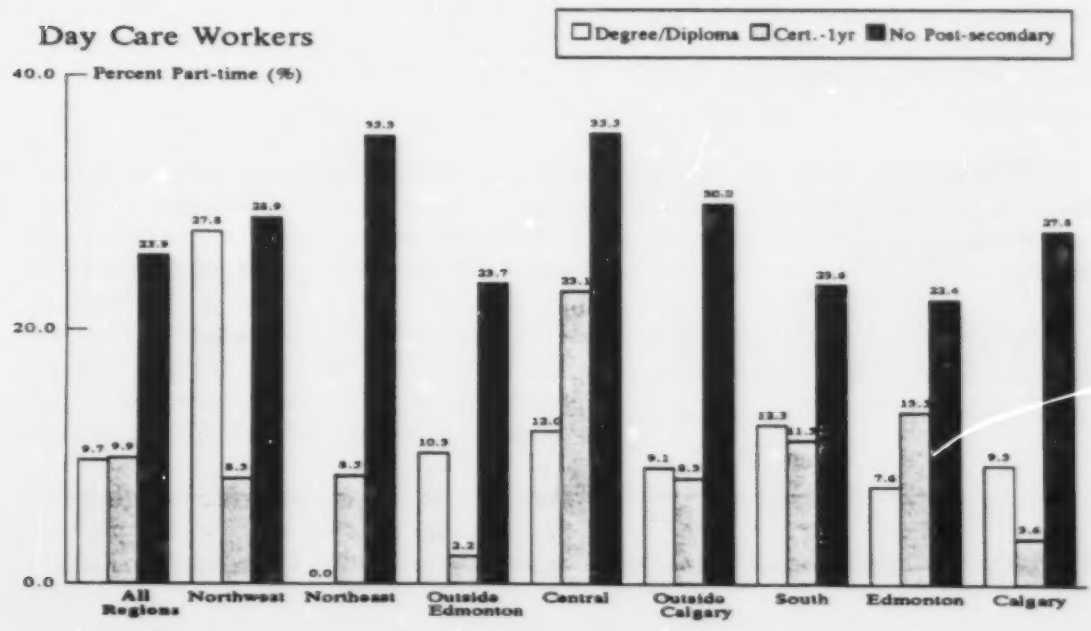


• Some social service regions had notably higher proportions of part-time personnel compared to other regions. The highest levels of part-time day care workers were reported in the central region (29.2%), Calgary (excluding the City of Calgary) (26.8%), and the Northwest region (25.5%), while the lowest proportions were reported in the City of Edmonton (18.8%), the Northeast region (20.7%), Edmonton (excluding the City of Edmonton) (20.0%), the South region (20.2%) and the City of Calgary (21.3%).

Percent Part-time Day Care Personnel with Credentials in Early Childhood Education by Social Service Region +

March 31, 1991





+ The percentage of part-time day care personnel with a diploma or certificate in fields related to child education are not displayed in the graphs.

5.0 Casual/Contract/Temporary Personnel

Casual/contract data on day care personnel were collected for the first time in the 1991 survey. Day care operators were requested to indicate the number of casual/contract day care workers employed, as well as the total number of hours worked, during the month of March, 1991. No information was collected on the educational qualifications of casual/contract day care personnel. Of the 638 day care operators who responded to the survey, 40.3 percent indicated that they employed casual/contract day care personnel, while 56.7 percent reported employing no casual/contract day care personnel. The remaining 3.0 percent of day care employers did not respond to the question.

5.1 Day Care Directors

- Of the total number of casual/contract personnel reported by day care centres (874) in 1991, 55 (6.3%) were day care directors. The average number of hours worked during March 1991, by casual/contract directors was 100.4.

- The total number of casual/contract hours reported for day care directors (5,524) was comparable to 35 full-time equivalent casual/contract positions (based on a 160 hour work month). This represents 4.0 percent of the total full-time equivalent positions for directors (permanent and casual/contract full-time equivalent combined).

- The majority of full-time equivalent casual/contract positions for directors was reported in the central (6), the City of Edmonton (11) and the City of Calgary (15) social service regions.

5.2 Day Care Workers

- Day care operators reported employing a total of 819 casual/contract day care workers during March, 1991. The average number of hours worked in March by these employees was 55.5.

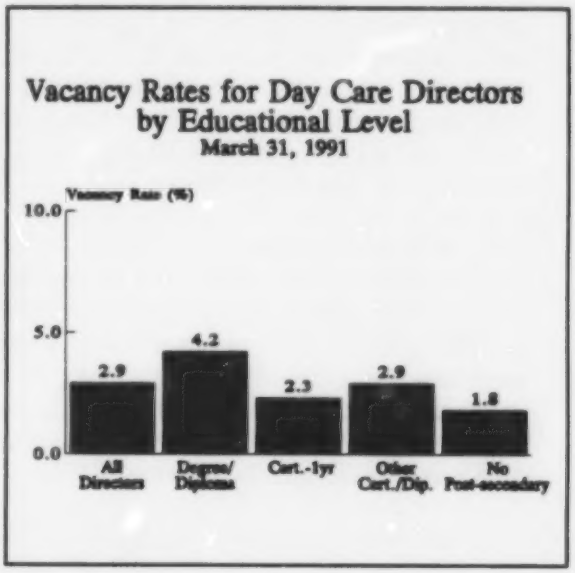
- The total number of casual/contract hours reported for day care workers (44,591) translated to 279 full-time equivalent workers (based on a 160 hour work month). The number of full-time equivalent casual/contract day care workers accounted for 5.3 percent of the total number of full-time equivalent day care workers employed (casual/contract and permanent full-time equivalent combined) during March, 1991.

- The highest proportions of casual/contract positions for day care workers (in relation to permanent full-time equivalents) were reported in the Central (11.6%), the City of Calgary (6.8%) and the Northwest (6.5%) social service regions. In all other social service regions, the percentage of full-time equivalent casual/contract day care workers was 5 percent or less.

6.0 Vacancy Rates

6.1 Day Care Directors

• The total number of full-time equivalent vacant positions for day care directors increased from 9 (1989) to 24 (1991). Overall, the vacancy rate for directors in 1991 was 2.9 percent, comparable to the vacancy rate reported for all health and social service occupations combined (2.7%).

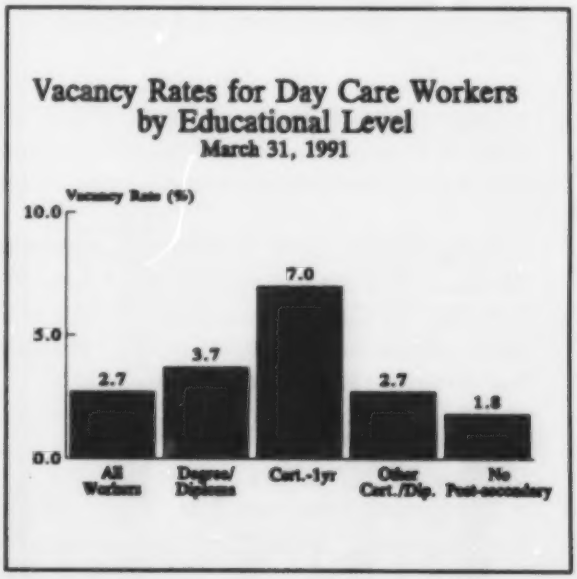


• The majority of the vacant positions for day care directors was reported in the cities of Edmonton (12) and Calgary (7) and was primarily for directors with a degree or diploma in early childhood education.

• The 1991 vacancy rate for directors with a degree or diploma in early childhood education was 4.2 percent, notably higher than the vacancy rates reported for directors with other educational qualifications. The higher vacancy rate for day care directors with a degree or diploma reflected an increase in the number of vacant positions for this occupational category from 1989 (6) to 1991 (12).

6.2 Day Care Workers

• The number of full-time equivalent vacant positions for day care workers dropped from 190 (1989) to 137 (1991). The vacancy rate declined slightly from 3.6 percent to 2.7 percent. Again, the vacancy rate for day care workers in 1991 was comparable to the vacancy rate reported by all health and social service personnel combined (2.7%).



• Notably high vacancy rates for day care workers with a one year certificate in early childhood education were reported from 1989 (7.4%) to 1991 (7.0%). The 1991 vacancy rate for day care workers with a degree or diploma in child care (3.7%) was considerably lower.

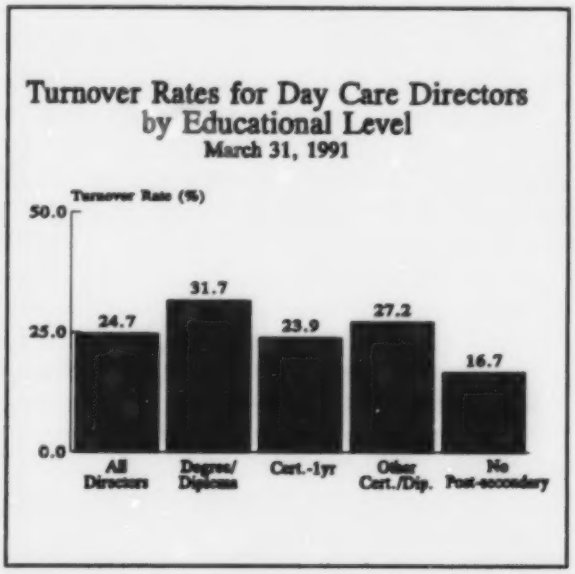
• The lowest vacancy rate in 1991 was reported for day care workers with no related post-secondary credentials (1.8%). Most of the vacant positions for this occupational group were reported in the cities of Edmonton (27) and Calgary (17).

7.0 Turnover Rates

Day care operators were asked to report the number of day care workers who terminated employment during the one year period from April 1, 1990 to March 31, 1991, excluding those individuals who were promoted or transferred. Resignations indicate the number of staff leaving day care settings throughout the year and to this extent reflect of the stability of day care personnel in their employment setting. It is important to recognize that the survey provides no measurement of where staff go following a resignation (e.g., whether they move on to another day care centre or leave the day care field entirely).

7.1 Day Care Directors

• The number of resignations among day care directors increased considerably from 79 (1989) to 205 (1991). The turnover rate, which expresses the number of resignations as a proportion of the total number of positions, more than doubled for day care directors, from 10.8 percent (1989) to 24.7 percent (1991).



• There were substantial increases in the number of resignations by directors across all educational levels. The largest increase in the number of resignations from 1989 to 1991 occurred among day care directors with a degree or diploma in early childhood education (35 to 87). The corresponding turnover rate for this group increased from 18.5 percent to 31.7 percent.

• Large turnover rate increases from 1989 to 1991 were also reported for day care directors with a one year certificate in early childhood education (10.9% to 23.9%) and for directors with no child care related post-secondary certification (5.6% to 16.7%).

• There was considerable variation across social service regions in the turnover rates among day care directors. The highest turnover rates were in the northeast region (35.2%), the City of Edmonton (29.1%), the Calgary (excluding the City of Calgary) region (25.9%), the City of Calgary (25.4%) and the Edmonton (excluding the City of Edmonton) region (19.6%). All other social service regions had turnover rates of less than 14 percent.

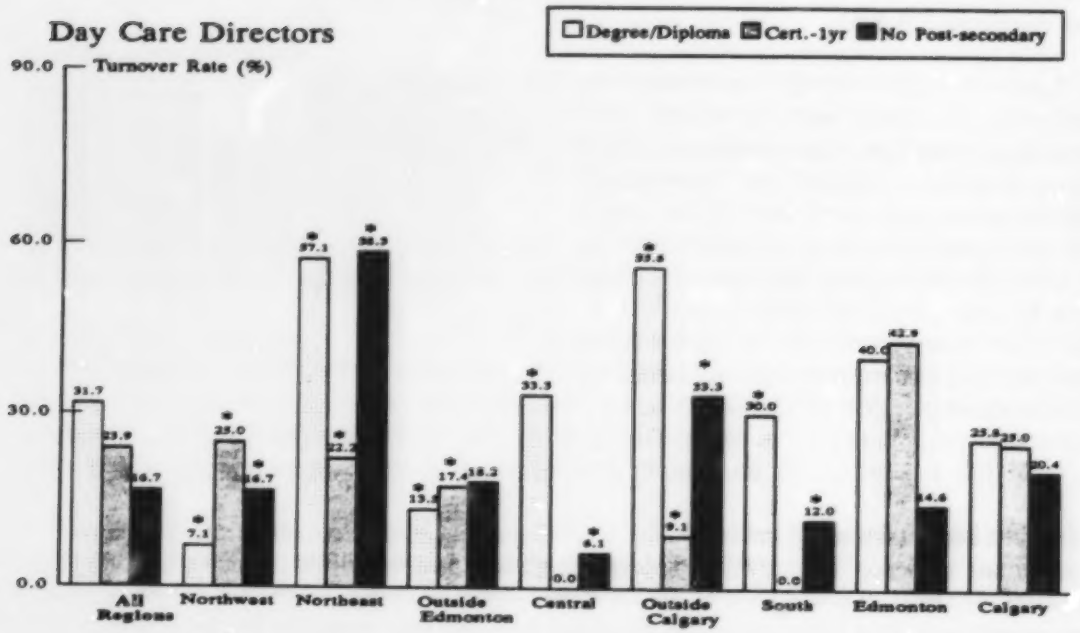
7.2 Day Care Workers

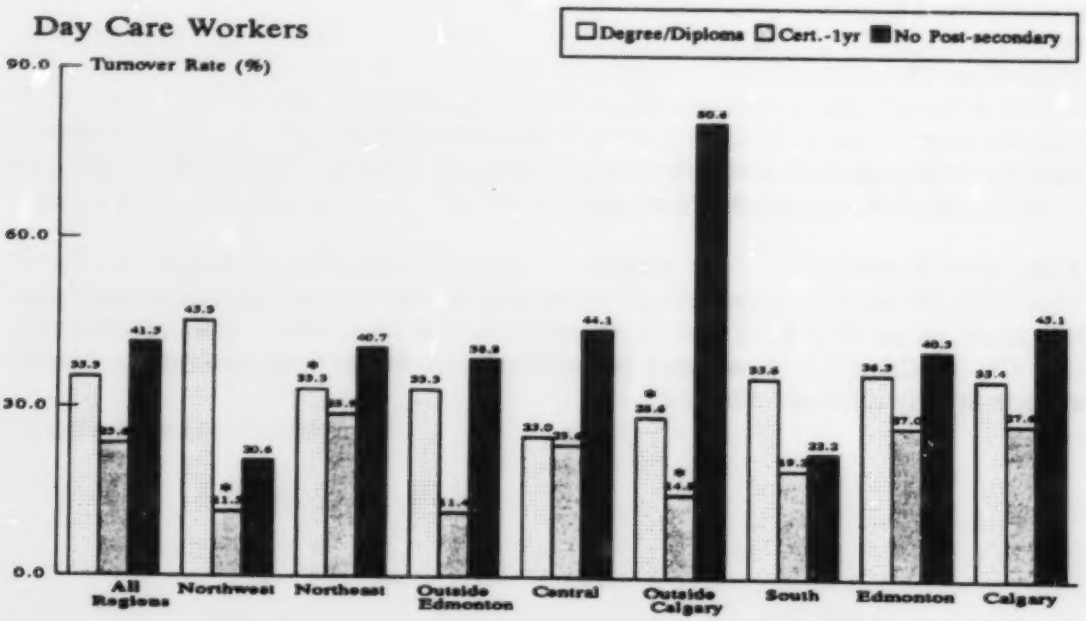
• The turnover rate among day care workers in 1991 (37.9%) was almost three times higher than the rate reported for all health and social service occupations combined (13.2%).

• The number of full-time equivalent resignations among day care workers increased by 284 from 1989 (1,610) to 1991 (1,894). The corresponding turnover rate rose from 31.0 percent (1989) to 37.9 percent (1991). The largest turnover rate increases from 1989 to 1991 were reported among day care workers with a degree or diploma (16.8% to 35.3%) and among those with a one year certificate (16.1% to 23.6%).

Turnover Rates Among Day Care Personnel with Credentials in Early Childhood Education by Social Service Region +

March 31, 1991



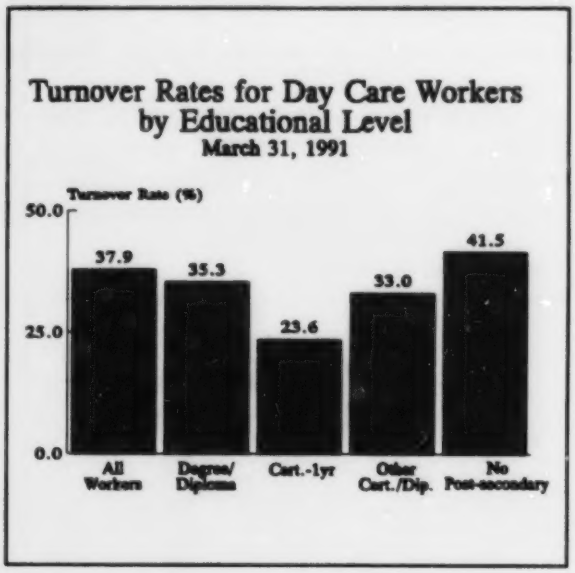


* Turnover rates are based on a small number (less than 6) of full-time equivalent resignations.

\+ Turnover rates for day care personnel with a diploma or certificate in fields related to child education are not displayed in the graphs.

• In 1991, the highest turnover rates were among day care workers with no related post-secondary credentials (41.5%). Lower, but still relatively high, turnover rates in 1991 were reported for day care workers with a degree or diploma (35.3%) and for workers with a one year certificate (23.6%).

• Turnover rates for day care workers, particularly for those with no related post-secondary credentials, were consistently high across all social service regions. Exceptionally high turnover rates were seen in the social service regions of Calgary (excluding the City of Calgary) (66.1%), in the City of Calgary (40.9%), and in the City of Edmonton (38.1%). The lowest turnover rates for day care workers were reported in the south region (21.8%) and in the northwest region (23.3%).



8.0 Three Month Vacant Positions

• In the last section of the survey, employers were asked to report the number of vacant positions on March 31, 1991, that had been vacant for three months or longer, while recruitment activities had been in progress. This information was requested from day care operators for the first time in 1991. Of the 638 day care operators who were asked this question, only 7.7 percent (49) reported that they had one or more three month vacancies.

8.1 Day Care Directors

• A total of 10 full-time equivalent positions for day care directors were reported vacant for three months or longer on March 31, 1991. Almost all of these three month vacant positions were reported in the City of Edmonton (6) and in the City of Calgary (3) and were primarily for directors with a diploma or certificate in early childhood education.

8.2 Day Care Workers

• There were 38 full-time equivalent vacant positions reported for day care workers on March 31, 1991. Again, almost all of these three month vacancies were either in the City of Edmonton (21) or in the City of Calgary (11) and were predominately for day care workers with a diploma or certificate in early childhood education.

9.0 Recruitment Difficulties

• For the first time in 1991, day care operators were requested to list the occupations for which they anticipated recruitment difficulties during the next year. Almost one half of day care operators, 46.1 percent (294), indicated that they expected to have recruitment difficulties during the next year, while the other one half of day care operators, 50.2 percent (320) reported that they expected no recruitment problems. A total of 3.8 percent (24) of day care centres did not respond to the question.

9.1 Day Care Directors

• A very low percentage of day care operators expected recruitment difficulties for day care directors. In comparing the recruitment difficulties for day care directors across educational levels, the highest percentage of employers expected recruitment problems for day care directors with a diploma (3.3%).

• The most frequent reasons given by employers for difficulties in the recruitment of day care directors related to a shortage of available staff (40.6%) and an inadequate salary (21.9%).

9.2 Day Care Workers

• A substantial proportion of day care operators expected recruitment problems for day care workers. Almost three quarters (73.6%) of employers anticipated difficulties in the recruitment of day care workers with a one year certificate in early childhood education. A notable proportion of employers (19.4%) also anticipated problems in the recruitment of day care workers with a diploma.

• The major reasons cited for the recruitment difficulties of day care workers related to the shortage of available personnel (44.3%) and an inadequate salary (27.7%).

10.0 Further Information

Further information on day care personnel or the methodology used in this report can be obtained from the Alberta Health and Social Services Disciplines Committee. In addition, individuals or organizations may request supplemental information and analyses specific to their needs. It should be noted that the Alberta Health and Social Services Disciplines Committee is able to release information on aggregate data only; data on individual employers is confidential and may only be released to the reporting employer. For further information, please contact:

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Telephone: (403)427-2655

Appendix 1. Methodology

The Alberta Health and Social Services Disciplines Committee has conducted a mail-out survey of employers in the health and social service sector in the province since 1979. Day care operators were added to this survey for the first time in 1988. These surveys were mailed to all day care centres in the province during the month of March each year and collected information on full-time and part-time permanent personnel employed on March 31, full-time and part-time vacancies on March 31, and full-time and part-time resignations occurring during the year prior to March 31. Survey response rates from day care centres have been very good. In the 1989, 1990 and 1991 surveys response rates were 95.9 percent, 96.7 percent and 96.5 percent respectively.

Two additional sections, which measured casual personnel and recruitment difficulties, were included in the day care survey for the first time in 1991. The section on casual personnel requested employers to indicate the total number of casual/contract day care directors and day care workers and the total number casual/contract hours worked by these personnel during the month of March.

The section on employer recruitment difficulties was divided into two parts. In the first part, employers were asked to indicate the number of full-time and part-time vacant positions that had been vacant three months or longer while recruitment activities had been in progress. In the second part, employers were requested to list the occupations for which they anticipated recruitment problems in the next year and the reasons for the anticipated staffing difficulty.

Employers were instructed to apply the following definitions when completing the survey:

Personnel employed:	all individuals employed by your organization on a regular or part-time basis.
Full-time:	thirty hours or more per week.
Part-time:	less than thirty hours per week.
Vacancies:	positions for which personnel are actively being recruited as of March 31.
Resignations:	individuals who terminated employment during the one year period from April 1 to March 31. Do not include persons who have been promoted or transferred.
Casual, Temporary, Contract, or Relief Personnel:	individuals who worked on-call, relief, or on a temporary basis and did not fill a regular full-time and/or part-time position. These individuals were paid directly through your organization or through an outside agency.

Appendix 2. Social Service Regions

APPENDIX 3(a). TOTAL NUMBER AND PERCENTAGE PERMANENT DAY CARE DIRECTORS EMPLOYED IN SOCIAL SERVICE REGIONS BY EDUCATIONAL LEVEL, MARCH 31, 1989 TO 1991

		ALL REGIONS		1 NORTHWEST		2 NORTHEAST		3 EDMONTON, city excluded		4 CENTRAL		5 CALGARY, city excluded		6 SOUTH		7 CITY of EDMONTON		8 CITY of CALGARY	
		#	%*	#	%*	#	%*	#	%*	#	%*	#	%*	#	%*	#	%*	#	%*
ALL DAY CARE DIRECTORS	1989	731	100.0	25	100.0	27	100.0	57	100.0	51	100.0	22	100.0	53	100.0	277	100.0	219	100.0
	1990	822	100.0	27	100.0	27	100.0	69	100.0	58	100.0	22	100.0	46	100.0	328	100.0	245	100.0
	1991	827	100.0	28	100.0	26	100.0	71	100.0	54	100.0	29	100.0	49	100.0	315	100.0	255	100.0
B.Ed. Child Educ.	1989	55	7.5	0	0	0	0	1	1.8	2	3.9	3	13.6	3	5.7	26	9.4	20	9.1
	1990	86	10.5	0	0	0	0	4	5.8	4	6.9	2	9.1	3	6.5	48	14.6	25	10.2
	1991	112	13.5	0	0	3	11.5	7	9.9	4	7.4	6	20.7	3	6.1	44	14.0	45	17.6
Diploma Child Educ.	1989	130	17.8	8	32.0	7	25.9	8	14.0	9	17.6	2	9.1	6	11.3	46	16.6	44	20.1
	1990	150	18.2	13	48.1	4	14.8	9	13.0	5	8.6	3	13.6	6	13.0	61	18.6	49	20.0
	1991	158	19.1	14	50.0	3	11.5	9	12.7	9	16.7	4	13.8	7	14.3	57	18.1	55	21.6
Cert. Child Educ.	1989	122	16.7	4	16.0	8	29.6	8	14.0	8	15.7	8	36.4	7	13.2	47	17.0	32	14.6
	1990	122	14.8	5	18.5	9	33.3	3	4.3	13	22.4	10	45.5	4	8.7	36	11.0	42	17.1
	1991	131	15.8	4	14.3	9	34.6	12	16.9	16	29.6	12	41.4	5	10.2	34	10.8	39	15.3
Other Day Care Cert.	1989	43	5.9	0	0	3	11.1	0	0	2	3.9	1	4.5	4	7.5	10	3.6	23	10.5
	1990	57	6.9	0	0	0	0	4	5.8	2	3.4	1	4.5	2	4.3	17	5.2	31	12.7
	1991	50	6.0	0	0	1	3.8	3	4.2	1	1.9	2	6.9	2	4.1	21	6.7	20	7.8
Related Degree/Diploma	1989	126	17.2	0	0.0	4	14.8	13	22.8	8	15.7	1	4.5	10	18.9	48	17.3	42	19.2
	1990	128	15.6	0	0	8	29.6	8	11.6	9	15.5	0	0	5	10.9	56	17.1	42	17.1
	1991	103	12.5	1	3.6	4	15.4	7	9.9	7	13.0	2	6.9	7	14.3	32	10.2	43	16.9
Unrelated Degree	1989	36	4.9	0	0	0	0	2	3.5	3	5.9	3	13.6	2	3.8	17	6.1	9	4.1
	1990	53	6.4	1	3.7	0	0	7	10.1	3	5.2	2	9.1	2	4.3	28	8.5	10	4.1
	1991	48	5.8	2	7.1	1	3.8	3	4.2	1	1.9	0	0	3	6.1	29	9.2	9	3.5
Other	1989	219	30.0	13	52.0	5	18.5	25	43.9	19	37.3	4	18.2	21	39.6	83	30.0	49	22.4
	1990	226	27.5	8	29.6	6	22.2	34	49.3	22	37.9	4	18.2	24	52.2	82	25.0	46	18.8
	1991	225	27.2	7	25.0	5	19.2	30	42.3	16	29.6	3	10.3	22	44.9	98	31.1	44	17.3

* Percentages reflect the proportion of day care directors having a particular educational credential out of the total number of day care directors employed during that year within that social service region.

APPENDIX 3(b). NUMBER AND PERCENT PART-TIME PERMANENT DAY CARE DIRECTORS EMPLOYED IN SOCIAL SERVICE REGIONS BY EDUCATIONAL LEVEL, MARCH 31, 1989 TO 1991

		ALL REGIONS		1 NORTHWEST		2 NORTHEAST		3 EDMONTON, city excluded		4 CENTRAL		5 CALGARY, city excluded		6 SOUTH		7 CITY of EDMONTON		8 CITY of CALGARY	
		# PT	% PT	# PT	% PT	# PT	% PT	# PT	% PT	# PT	% PT	# PT	% PT	# PT	% PT	# PT	% PT	# PT	% PT
ALL DAY CARE DIRECTORS	1989	31	4.2	3	12.0	0	0.0	1	1.8	5	9.8	0	0.0	2	3.8	17	6.1	3	1.4
	1990	40	4.9	1	3.7	5	18.5	5	7.2	4	6.9	0	0.0	1	2.2	18	5.5	6	2.4
	1991	43	5.2	0	0.0	0	0.0	2	2.8	7	13.0	4	13.8	0	0.0	14	4.4	16	6.3
B.Ed. Child Educ.	1989	2	3.6	0	0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	1	3.8	1	5.0
	1990	5	5.8	0	0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	5	10.4	0	0.0
	1991	11	9.8	0	0	0	0.0	0	0.0	2	50.0	2	33.3	0	0.0	0	0.0	7	15.6
Diploma Child Educ.	1989	6	4.6	1	12.5	0	0.0	0	0.0	1	11.1	0	0.0	0	0.0	4	8.7	0	0.0
	1990	7	4.7	0	0.0	0	0.0	1	11.1	0	0.0	0	0.0	0	0.0	4	6.6	2	4.1
	1991	7	4.4	0	0.0	0	0.0	1	11.1	0	0.0	0	0.0	0	0.0	1	1.8	5	9.1
Cert. Child Educ.	1989	9	7.4	0	0.0	0	0.0	1	12.5	1	12.5	0	0.0	1	14.3	6	12.8	0	0.0
	1990	2	1.6	0	0.0	1	11.1	0	0.0	0	0.0	0	0.0	0	0.0	1	2.8	0	0.0
	1991	9	6.9	0	0.0	0	0.0	1	8.3	4	25.0	2	16.7	0	0.0	2	5.9	0	0.0
Other Day Care Cert.	1989	0	0.0	0	0	0	0.0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	1990	1	1.8	0	0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	3.2
	1991	2	4.0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	4.8	1	5.0
Related Degree/Diploma	1989	2	1.6	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.1	1	2.4
	1990	10	7.8	0	0	4	50.0	0	0.0	1	11.1	0	0	1	20.0	1	1.8	3	7.1
	1991	4	3.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	3.1	3	7.0
Unrelated Degree	1989	1	2.8	0	0	0	0	0	0.0	1	33.3	0	0.0	0	0.0	0	0.0	0	0.0
	1990	3	5.7	1	100.0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	2	7.1	0	0.0
	1991	2	4.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0.0	2	6.9	0	0.0
Other	1989	11	5.0	2	15.4	0	0.0	0	0.0	2	10.5	0	0.0	1	4.8	5	6.0	1	2.0
	1990	12	5.3	0	0.0	0	0.0	4	11.8	3	13.6	0	0.0	0	0.0	5	6.1	0	0.0
	1991	8	3.6	0	0.0	0	0.0	0	0.0	1	6.2	0	0.0	0	0.0	7	7.1	0	0.0

APPENDIX 3(c). NUMBER VACANT POSITIONS AND VACANCY RATES (VR) FOR PERMANENT DAY CARE DIRECTORS IN SOCIAL SERVICE REGIONS BY EDUCATIONAL LEVEL, MARCH 31, 1989 TO 1991*

		ALL REGIONS		1 NORTHWEST		2 NORTHEAST		3 EDMONTON, city excluded		4 CENTRAL		5 CALGARY, city excluded		6 SOUTH		7 CITY of EDMONTON		8 CITY of CALGARY	
		#	VR	#	VR	#	VR	#	VR	#	VR	#	VR	#	VR	#	VR	#	VR
ALL DAY CARE DIRECTORS	1989	9	1.2	0	0.0	0	0.0	3	5.0	1	2.0	0	0.0	0	0.0	2	0.6	3	1.4
	1990	18	2.1	0	0.0	0	0.0	2	2.9	0	0.0	0	0.0	0	0.0	6	1.8	10	3.8
	1991	24	2.9	0	0.0	1	3.7	4	5.4	1	1.9	0	0.0	0	0.0	12	3.6	7	2.6
B.Ed. Child Educ.	1989	1	0.9	0	0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.9	0	0.0
	1990	3	3.5	0	0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.2	2	7.4
	1991	3	2.7	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.2	2	4.6
Diploma Child Educ.	1989	5	3.8	0	0.0	0	0.0	1	11.1	1	10.5	0	0.0	0	0.0	1	2.2	2	4.3
	1990	6	3.9	0	0.0	0	0.0	1	10.5	0	0.0	0	0.0	0	0.0	3	4.8	2	4.0
	1991	9	5.2	0	0.0	1	25.0	3	26.1	0	0.0	0	0.0	0	0.0	4	5.8	1	1.9
Cert. Child Educ.	1989	2	1.7	0	0.0	0	0.0	2	21.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	1990	3	2.4	0	0.0	0	0.0	1	25.0	0	0.0	0	0.0	0	0.0	1	2.7	1	2.3
	1991	3	2.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	5.7	1	2.5
Other Day Care Cert.	1989	0	0.0	0	0	0	0.0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	1990	3	4.2	0	0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	7.6
	1991	1	2.0	0	0	0	0.0	0	0.0	1	50.0	0	0.0	0	0.0	0	0.0	0	0.0
Related Degree/Diploma	1989	1	0.8	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4
	1990	0	0.0	0	0	0	0.0	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0.0
	1991	4	3.3	0	0.0	0	0.0	1	12.5	0	0.0	0	0.0	0	0.0	1	3.1	2	3.5
Unrelated Degree	1989	0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	1990	1	1.9	0	0.0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	9.1
	1991	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0.0
Other	1989	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	1990	2	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.2	1	2.1
	1991	5	2.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	4.1	1	2.2

* See Appendix 5 for a definition of the formulas used to calculate vacant positions and vacancy rates.

APPENDIX 3(d). NUMBER RESIGNED POSITIONS AND TURNOVER RATES (TR) FOR PERMANENT DAY CARE DIRECTORS IN SOCIAL SERVICE REGIONS BY EDUCATIONAL LEVEL, MARCH 31, 1989 TO 1991*

		ALL REGIONS		1 NORTHWEST		2 NORTHEAST		3 EDMONTON, city excluded		4 CENTRAL		5 CALGARY, city excluded		6 SOUTH		7 CITY of EDMONTON		8 CITY of CALGARY	
		#	TR	#	TR	#	TR	#	TR	#	TR	#	TR	#	TR	#	TR	#	TR
ALL DAY CARE DIRECTORS	1989	79	10.8	6	25.5	2	7.4	6	10.1	6	11.1	3	13.6	2	3.8	32	11.9	22	10.0
	1990	104	12.7	3	11.3	3	12.2	21	29.9	4	6.2	2	9.1	5	11.0	31	9.5	36	14.3
	1991	205	24.7	4	12.5	10	35.2	15	19.6	7	13.6	7	25.9	6	12.2	93	29.1	65	25.4
B.Ed. Child Educ.	1989	19	33.9	0	0	0	0	0	0.0	0	0.0	1	33.3	0	0.0	12	44.2	6	30.8
	1990	19	22.0	0	0	0	0	2	50.0	0	0.0	0	0.0	0	0.0	9	19.4	8	29.6
	1991	36	32.9	0	0	1	33.3	0	0.0	2	66.7	3	60.0	2	66.7	19	42.2	9	20.7
Diploma Child Educ.	1989	16	12.1	1	13.3	2	28.6	2	22.2	3	26.3	0	0.0	0	0.0	6	12.2	3	6.5
	1990	18	11.8	1	7.7	1	25.0	1	10.5	0	0.0	0	0.0	1	16.7	8	12.9	6	12.0
	1991	51	31.0	1	7.1	3	75.0	3	21.7	2	22.2	2	50.0	1	14.3	23	38.3	16	29.9
Cert. Child Educ.	1989	13	10.9	3	75.0	0	0.0	1	10.5	3	40.0	1	12.5	1	15.4	1	2.3	3	9.4
	1990	16	12.5	0	0.0	1	11.8	2	50.0	1	3.8	1	10.0	0	0.0	5	13.7	6	14.0
	1991	31	23.9	1	25.0	2	22.2	2	17.4	0	0.0	1	9.1	0	0.0	15	42.9	10	25.0
Other Day Care Cert.	1989	4	9.3	0	0	0	0.0	0	0	0	0.0	0	0.0	0	0.0	1	10.0	3	13.0
	1990	3	5.1	0	0	0	0	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	2	6.1
	1991	12	24.0	0	0	0	0.0	2	66.7	1	50.0	0	0.0	0	0.0	3	14.6	6	30.8
Related Degree/Diploma	1989	13	10.3	1	0	0	0.0	1	7.7	0	0.0	0	0.0	0	0.0	6	12.6	5	11.8
	1990	10	8.1	0	0	0	0.0	3	37.5	1	11.8	0	0	0	0.0	4	7.2	2	4.9
	1991	30	28.7	0	0.0	0	0.0	2	25.0	1	14.3	0	0.0	0	0.0	15	44.6	13	29.1
Unrelated Degree	1989	4	11.3	0	0	0	0	2	100.0	0	0.0	0	0.0	0	0.0	1	5.9	1	11.1
	1990	10	19.0	0	0.0	0	0	4	57.1	1	33.3	0	0.0	1	50.0	1	3.7	3	27.3
	1991	16	34.0	1	25.0	1	100.0	3	83.3	0	0.0	0	0	0	0.0	9	32.1	3	33.3
Other	1989	10	4.7	1	8.3	0	0.0	0	0.0	0	0.0	1	25.0	1	4.9	6	7.5	1	2.1
	1990	29	12.8	2	25.0	1	16.7	9	26.6	1	4.9	0	0.0	3	12.5	4	5.0	9	19.1
	1991	30	13.1	1	14.3	3	50.0	4	11.7	1	6.5	1	33.3	3	13.6	10	9.6	8	17.8

* See Appendix 5 for a definition of the formulas used to calculate resigned positions and turnover rates.

APPENDIX 4(a). TOTAL NUMBER AND PERCENTAGE PERMANENT DAY CARE WORKERS EMPLOYED IN SOCIAL SERVICE REGIONS BY EDUCATIONAL LEVEL, MARCH 31, 1989 TO 1991

		ALL REGIONS		1 NORTHWEST		2 NORTHEAST		3 EDMONTON, city excluded		4 CENTRAL		5 CALGARY, city excluded		6 SOUTH		7 CITY of EDMONTON		8 CITY of CALGARY	
		#	%*	#	%*	#	%*	#	%*	#	%*	#	%*	#	%*	#	%*	#	%*
ALL DAY CARE WORKERS	1989	5,490	100.0	176	100.0	178	100.0	432	100.0	408	100.0	142	100.0	287	100.0	2,027	100.0	1,840	100.0
	1990	5,748	100.0	180	100.0	160	100.0	527	100.0	376	100.0	164	100.0	310	100.0	2,015	100.0	2,016	100.0
	1991	5,435	100.0	192	100.0	164	100.0	450	100.0	373	100.0	153	100.0	321	100.0	1,996	100.0	1,786	100.0
B.Ed. Child Educ.	1989	159	2.9	0	0.0	0	0	2	0.5	6	1.5	0	0	4	1.4	46	2.3	101	5.5
	1990	148	2.6	1	0.6	0	0	10	1.9	4	1.1	3	1.8	4	1.3	58	2.9	68	3.4
	1991	194	3.6	2	1.0	1	0.6	12	2.7	5	1.3	2	1.3	8	2.5	92	4.6	72	4.0
Diploma Child Educ.	1989	544	9.9	28	15.9	15	8.4	18	4.2	43	10.5	3	2.1	14	4.9	192	9.5	231	12.6
	1990	590	10.3	37	20.6	10	6.2	12	2.3	37	9.8	5	3.0	16	5.2	248	12.3	225	11.2
	1991	521	9.6	34	17.7	14	8.5	17	3.8	45	12.1	9	5.9	16	5.0	212	10.6	174	9.7
Cert. Child Educ.	1989	543	9.9	16	9.1	55	30.9	25	5.8	44	10.8	9	6.3	46	16.0	149	7.4	199	10.8
	1990	422	7.3	14	7.8	49	30.6	16	3.0	53	14.1	9	5.5	52	16.8	78	3.9	151	7.5
	1991	538	9.9	24	12.5	47	28.7	46	10.2	78	20.9	12	7.8	53	16.5	111	5.6	167	9.4
Other Day Care Cert.	1989	158	2.9	0	0.0	6	3.4	20	4.6	2	0.5	0	0	2	0.7	69	3.4	59	3.2
	1990	205	3.6	1	0.6	4	2.5	7	1.3	3	0.8	2	1.2	6	1.9	83	4.1	99	4.9
	1991	218	4.0	0	0.0	11	6.7	8	1.8	11	2.9	6	3.9	8	2.5	82	4.1	92	5.2
Related Degree/Dip.	1989	283	5.2	1	0.6	0	0.0	19	4.4	14	3.4	9	6.3	9	3.1	107	5.3	124	6.7
	1990	311	5.4	3	1.7	1	0.6	24	4.6	10	2.7	5	3.0	17	5.5	111	5.5	140	6.9
	1991	239	4.4	4	2.1	6	3.7	8	1.8	6	1.6	4	2.6	16	5.0	88	4.4	107	6.0
Unrelated Degree	1989	159	2.9	7	4.0	0	0.0	10	2.3	15	3.7	2	1.4	10	3.5	43	2.1	72	3.9
	1990	247	4.3	3	1.7	4	2.5	21	4.0	15	4.0	2	1.2	6	1.9	120	6.0	76	3.8
	1991	239	4.4	9	4.7	9	5.5	14	3.1	21	5.6	14	9.2	20	6.2	79	4.0	73	4.1
Other	1989	3,644	66.4	124	70.5	102	57.3	338	78.2	284	69.6	119	83.8	202	70.4	1,421	70.1	1,054	57.3
	1990	3,825	66.5	121	67.2	92	57.5	437	82.9	254	67.6	138	84.1	209	67.4	1,317	65.4	1,257	62.4
	1991	3,486	64.1	119	62.0	76	46.3	345	76.7	207	55.5	106	69.3	200	62.3	1,332	66.7	1,101	61.6

* Percentages reflect the proportion of day care workers having a particular educational credential out of the total number of day care workers employed during that year within that social service region.

APPENDIX 4(b). NUMBER AND PERCENT PART-TIME PERMANENT DAY CARE WORKERS EMPLOYED IN SOCIAL SERVICE REGIONS BY EDUCATIONAL LEVEL, MARCH 31, 1989 TO 1991

		ALL REGIONS		1 NORTHWEST		2 NORTHEAST		3 EDMONTON, city excluded		4 CENTRAL		5 CALGARY, city excluded		6 SOUTH		7 CITY of EDMONTON		8 CITY of CALGARY	
		# PT	% PT	# PT	% PT	# PT	% PT	# PT	% PT	# PT	% PT	# PT	% PT	# PT	% PT	# PT	% PT	# PT	% PT
ALL DAY CARE WORKERS	1989	972	17.7	57	32.4	31	17.4	65	15.0	107	26.2	35	24.6	68	23.7	316	15.6	293	15.9
	1990	1,114	19.4	45	25.0	31	19.4	106	20.1	101	26.9	41	25.0	67	21.6	353	17.5	370	18.4
	1991	1,143	21.0	49	25.5	34	20.7	90	20.0	109	29.2	41	26.8	65	20.2	375	18.8	380	21.3
B.Ed. Child Educ.	1989	16	10.1	0	0	0	0	0	0.0	1	16.7	0	0	1	25.0	10	21.7	4	4.0
	1990	16	10.8	0	0.0	0	0	4	40.0	2	50.0	0	0.0	1	25.0	3	5.2	6	8.8
	1991	22	11.3	1	50.0	0	0.0	3	25.0	2	40.0	0	0.0	1	12.5	10	10.9	5	6.9
Diploma Child Educ.	1989	31	5.7	3	10.7	0	0.0	0	0.0	2	4.7	0	0.0	0	0.0	8	4.2	18	7.8
	1990	32	5.6	0	0.0	0	0.0	0	0.0	2	5.4	1	20.0	2	12.5	8	3.2	19	8.4
	1991	47	9.0	9	26.5	0	0.0	0	0.0	4	8.9	1	11.1	2	12.5	13	6.1	18	10.3
Cert. Child Educ.	1989	37	6.8	0	0.0	9	16.4	0	0.0	6	13.6	2	22.2	8	17.4	4	2.7	8	4.0
	1990	33	7.8	1	7.1	6	12.2	1	6.2	5	9.4	0	0.0	6	11.5	6	7.7	8	5.3
	1991	53	9.9	2	8.3	4	8.5	1	2.2	18	23.1	1	8.3	6	11.3	15	13.5	6	3.6
Other Day Care Cert.	1989	11	7.0	0	0	1	16.7	5	25.0	0	0.0	0	0	0	0.0	2	2.9	3	5.1
	1990	10	4.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	3.6	7	7.1
	1991	18	8.3	0	0	0	0.0	0	0.0	2	18.2	1	16.7	3	37.5	7	8.5	5	5.4
Related Degree/Dip.	1989	37	13.1	0	0.0	0	0	0	0.0	5	35.7	1	11.1	2	22.2	12	11.2	17	13.7
	1990	38	12.2	0	0.0	0	0.0	5	20.8	0	0.0	1	20.0	2	11.8	17	15.3	13	9.3
	1991	40	16.7	0	0.0	0	0.0	1	12.5	2	33.3	2	50.0	1	6.2	14	15.9	20	18.7
Unrelated Degree	1989	45	28.3	4	57.1	0	0	1	10.0	6	40.0	0	0.0	7	70.0	8	18.6	19	26.4
	1990	39	15.8	0	0.0	0	0.0	5	23.8	2	13.3	0	0.0	1	16.7	20	16.7	11	14.5
	1991	51	21.3	1	11.1	0	0.0	3	21.4	5	23.8	3	21.4	6	30.0	10	12.7	23	31.5
Other	1989	795	21.8	50	40.3	21	20.6	59	17.5	87	30.6	32	26.9	50	24.8	272	19.1	224	21.3
	1990	946	24.7	44	36.4	25	27.2	91	20.8	90	35.4	39	28.3	55	26.3	296	22.5	306	24.3
	1991	912	26.2	36	30.3	30	39.5	82	23.8	76	36.7	33	31.1	46	23.0	306	23.0	303	27.5

APPENDIX 4(c). NUMBER VACANT POSITIONS AND VACANCY RATES (VR) FOR PERMANENT DAY CARE WORKERS IN SOCIAL SERVICE REGIONS BY EDUCATIONAL LEVEL, MARCH 31, 1989 TO 1991*

		ALL REGIONS		1 NORTHWEST		2 NORTHEAST		3 EDMONTON, city excluded		4 CENTRAL		5 CALGARY, city excluded		6 SOUTH		7 CITY of EDMONTON		8 CITY of CALGARY	
		#	VR	#	VR	#	VR	#	VR	#	VR	#	VR	#	VR	#	VR	#	VR
ALL DAY CARE WORKERS	1989	190	3.6	3	2.0	6	3.6	26	6.0	25	6.6	1	0.8	7	2.7	76	3.9	47	2.7
	1990	178	3.3	2	0.9	4	2.4	12	2.4	9	2.5	7	4.7	7	2.5	61	3.2	78	4.1
	1991	137	2.7	7	3.7	1	0.7	22	5.2	3	0.8	3	2.2	7	2.4	53	2.8	42	2.6
B.Ed. Child Educ.	1989	4	2.6	0	0	0	0	0	0.0	1	15.4	0	0	0	0.0	2	4.7	1	1.0
	1990	2	1.4	0	0.0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.7	1	1.5
	1991	2	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	1.7	0	0.0
Diploma Child Educ.	1989	43	7.4	1	3.6	1	6.2	2	10.0	6	11.6	0	0.0	0	0.0	24	11.1	10	4.1
	1990	35	5.7	0	0.0	0	0.0	4	22.6	0	0.0	0	0.0	2	11.8	15	5.8	14	6.1
	1991	25	4.7	1	3.3	0	0.0	4	19.0	1	2.3	0	0.0	0	0.0	10	4.6	9	4.9
Cert. Child Educ.	1989	42	7.4	0	0.0	3	5.6	7	20.6	6	11.8	0	0.0	2	3.4	13	8.1	13	6.0
	1990	33	7.4	0	0.0	3	5.2	2	11.4	3	5.6	0	0.0	2	3.9	11	12.8	12	7.5
	1991	39	7.0	3	11.5	0	0.0	7	13.3	1	1.4	2	14.8	2	3.8	12	10.0	12	6.8
Other Day Care Cert.	1989	3	1.9	0	0	0	0.0	0	0.0	0	0.0	0	0	0	0.0	2	2.9	1	1.7
	1990	7	3.4	0	0.0	1	20.0	1	12.5	0	0.0	0	0.0	0	0.0	3	3.6	2	2.1
	1991	8	3.7	1	100.0	0	0.0	3	23.8	0	0.0	0	0.0	0	0.0	3	3.7	2	2.2
Related Degree/Dip.	1989	7	2.6	0	0.0	0	0	1	2.6	1	4.2	0	0.0	1	11.1	4	3.8	1	0.9
	1990	4	1.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	1.4	3	1.8
	1991	4	1.8	0	0.0	1	14.3	0	0.0	0	0.0	0	0.0	1	3.1	0	0.0	3	2.5
Unrelated Degree	1989	2	1.4	0	0.0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.5	1	1.6
	1990	4	1.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	3.5	0	0.0
	1991	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other	1989	89	2.7	2	2.0	2	2.1	17	5.1	13	4.9	1	1.0	5	2.5	30	2.3	21	2.1
	1990	94	2.7	2	1.5	0	0.0	5	1.3	6	2.6	7	5.6	3	1.6	26	2.1	46	4.0
	1991	60	1.9	2	1.9	0	0.0	9	2.7	1	0.3	1	1.1	5	2.5	27	2.2	17	1.8

* See Appendix 5 for a definition of the formulas used to calculate vacant positions and vacancy rates.

APPENDIX 4(d). NUMBER RESIGNED POSITIONS AND TURNOVER RATES (TR) FOR PERMANENT DAY CARE WORKERS IN SOCIAL SERVICE REGIONS BY EDUCATIONAL LEVEL, MARCH 31, 1989 TO 1991*

		ALL REGIONS		1 NORTHWEST		2 NORTHEAST		3 EDMONTON, city excluded		4 CENTRAL		5 CALGARY, city excluded		6 SOUTH		7 CITY of EDMONTON		8 CITY of CALGARY	
		#	TR	#	TR	#	TR	#	TR	#	TR	#	TR	#	TR	#	TR	#	TR
ALL DAY CARE WORKERS	1989	1,610	31.0	49	32.2	42	24.9	104	24.4	102	26.9	36	28.7	67	25.6	489	25.1	723	41.6
	1990	2,231	41.5	47	29.6	54	36.1	209	42.9	137	40.9	90	59.5	70	24.7	630	33.1	996	52.2
	1991	1,894	37.9	41	23.3	52	35.1	152	35.6	117	36.4	90	66.1	65	21.8	709	38.1	670	40.9
B.Ed. Child Educ.	1989	19	12.3	1	0	0	0	1	50.0	1	7.7	0	0	0	0.0	7	16.3	10	9.5
	1990	61	43.0	0	0.0	0	0	3	31.3	2	66.7	0	0.0	0	0.0	29	50.4	28	41.7
	1991	70	37.7	1	66.7	0	0.0	6	52.4	3	75.0	1	50.0	1	13.3	26	29.4	32	46.0
Diploma Child Educ.	1989	103	18.0	7	25.5	2	12.5	4	20.0	2	4.2	2	66.7	2	14.3	50	23.6	34	14.7
	1990	150	24.6	9	24.3	11	110.0	6	35.5	11	29.2	0	0.0	0	0.0	57	21.8	57	24.8
	1991	180	34.5	14	44.3	5	35.7	5	23.8	9	20.5	2	23.5	7	46.7	85	39.2	54	31.1
Cert. Child Educ.	1989	91	16.1	2	12.5	14	26.2	4	11.1	7	14.0	2	25.0	13	28.7	10	6.2	41	19.5
	1990	131	29.8	4	29.6	13	26.8	9	51.4	6	11.2	0	0.0	12	23.5	28	32.0	59	37.1
	1991	130	23.6	3	11.5	13	28.9	6	11.4	17	23.6	2	14.8	10	19.2	31	27.0	49	27.6
Other Day Care Cert.	1989	19	11.9	1	0	0	0.0	0	0.0	0	0.0	0	0	0	0.0	9	12.1	10	16.2
	1990	42	20.0	0	0.0	1	20.0	2	25.0	6	200.0	0	0.0	0	0.0	19	21.9	14	14.4
	1991	49	22.4	0	0.0	0	0.0	1	4.8	2	20.0	0	0.0	0	0.0	18	21.5	29	31.1
Related Degree/Dip.	1989	57	20.8	1	50.0	1	0	2	10.3	2	12.5	3	35.3	3	27.8	31	29.0	16	13.3
	1990	55	18.6	0	0.0	0	0.0	4	18.6	6	60.0	1	22.2	0	0.0	22	20.7	23	16.5
	1991	97	43.3	0	0.0	6	78.6	9	120.0	4	70.0	2	50.0	3	15.6	32	39.5	43	42.7
Unrelated Degree	1989	80	57.8	0	0.0	2	0	2	21.1	4	33.3	0	0.0	3	38.5	7	16.3	64	100.0
	1990	102	43.8	0	0.0	0	0.0	5	24.3	4	25.0	0	0.0	1	18.2	22	19.3	71	100.0
	1991	89	41.5	0	0.0	2	22.2	7	52.0	12	62.2	2	12.0	3	14.7	38	51.4	27	43.1
Other	1989	1,242	37.2	38	37.1	24	25.1	91	28.0	88	34.6	29	27.9	47	25.9	376	28.6	551	57.2
	1990	1,692	49.1	34	33.8	29	35.8	181	45.6	103	47.8	89	70.5	57	30.9	455	38.0	746	64.8
	1991	1,281	41.5	23	22.3	27	43.4	120	38.2	72	42.2	82	90.1	42	22.9	480	39.8	438	45.3

* See Appendix 5 for a definition of the formulas used to calculate resigned positions and turnover rates.

Appendix 5. Definition of Terms

1. Full-time Equivalent Positions (FTE positions):
   FTE Positions = [full-time + (part-time/2)] number of personnel + [full-time + (part-time/2)] number of vacancies

2. Full-time Equivalent Vacancies (FTE vacant positions):
   FTE Vacant Positions = [full-time + (part-time/2)] number of vacancies

3. Vacancy Rate:
   $$\textbf{Vacancy Rate} = \frac{\text{full-time equivalent vacant positions}}{\text{full-time equivalent positions}} \times 100$$

4. Full-time Equivalent Resignations (FTE resignations):
   FTE Resignations = [full-time + (part-time/2)] number of resignations

5. Turnover Rate:
   $$\textbf{Turnover Rate} = \frac{\text{full-time equivalent resignations}}{\text{full-time equivalent positions}} \times 100$$